

mounting frame further having a vertical spring chamber between said first and second supporting walls;

a flint spring being received in said spring chamber;  
a gas lever being pivotally mounted between said first and second  
5 supporting walls;

a gas valve with a gas nozzle said gas nozzle being engaged with an end of said gas lever to permit release of gas from an interior of said lighter body via said gas valve;

an ignition device comprising a flint and a striking wheel,  
10 said striking wheel having a circumferential coarse striking surface being positioned right above and in contact with said flint and rotatably mounting between said first and second supporting walls, wherein said striking wheel further comprising two circular discs located at said two sides of said striking  
15 surface, each of said circular discs having a circumferential surface and positioned within [to] each of two gaps formed between said first and second supporting walls and said striking wheel; and

a U-shaped wind shield mounted on said first and second  
20 supporting walls to cover said gas nozzle and said first and second supporting walls, said wind shield having an all around vertical U-shaped side wall which has a round end portion and two wing portion extending from said round end portion, a top wall horizontally and inwardly extending from a top side of said round  
25 end portion of said U-shaped side wall and defining a cutout right above said gas nozzle, and a first and a second L-shaped

bent-edge member which are respectively and perpendicularly bent from a top side and an end side of said wing portions, wherein said first and second bent-edge members are respectively extended from said top wall along said top side and said end side of each of said wing portions for fittedly and respectively resting on a horizontal top edge and a vertical rear edge of each of said first and second supporting walls, a top end corner of each of said wing portions forming a curved corner which has a curvature matching with at least a quarter of a circumference of said striking wheel, so that said striking wheel is sidewardly covered by said two wing portions of said windshield, wherein said first and second bent-edge members of said wind shield are respectively and inwardly extended until abutting two sides of said striking wheel to form two protecting bent-edge members for better striking contact by increasing a contact area with a user's thumb.

13. (FIRST AMENDED) A disposable lighter, comprising:  
a lighter body for receiving a liquefied fuel therein;  
a mounting frame, which is sealedly affixed on top of said lighter body, comprising a first and a second supporting wall upwardly extended from two sides of said mounting frame, said mounting frame further having a vertical spring chamber between said first and second supporting walls;  
a flint spring being received in said spring chamber;  
a gas lever being pivotally mounted between said first and second supporting walls;

a gas valve with a gas nozzle, said gas nozzle being engaged with an end of said gas lever to permit release of gas from an interior of said lighter body via said gas valve;

an ignition device comprising a flint and a striking wheel,  
5 said striking wheel having a circumferential coarse striking surface being positioned right above and in contact with said flint and rotatably mounting between said first and second supporting walls, wherein said striking wheel further comprising two circular discs located at said two sides of said striking  
10 surface, each of said circular discs having a circumferential surface and positioned within [to] each of two gaps formed between said first and second supporting walls and said striking wheel; and

a U-shaped wind shield extends over said first and second  
15 supporting walls to cover said gas nozzle and said first and second supporting walls, said wind shield having an all around vertical U-shaped side wall which has a round end portion and two wing portions extending from said round end portion, and a first and a second L-shaped bent-edge members which are respectively  
20 and perpendicularly bent from a top side and an end side of said wing portions, said striking surface at an elevation lower than said bent-edge members, wherein said first and second bent-edge members are respectively extended from [said] a top wall along said top side and said end side of each of said wing portions, a  
25 top end corner of each of said wing portions forming a curved corner which has a curvature matching with at least a quarter of

a circumference of said striking wheel, so that said striking wheel is sidewardly covered by said two wing portions of said windshield, wherein said first and second bent-edge members of said windshield are inwardly extended to form two protecting bent-edge members for better striking contact by increasing a contact area with a user's thumb.

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AMENDMENT AND RESPONSE TO OFFICE ACTION MAILED 03/8/2002

S/N 09/844,564 (filed: 04/27/2001)

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Clean Version of Amended Claims 1 and 13:

1. (SECOND AMENDED) A disposable lighter, comprising:  
a lighter body for receiving a liquefied fuel therein;  
a mounting frame, which is sealedly affixed on top of said  
5 lighter body, comprising a first and a second supporting wall  
upwardly extended from two sides of said mounting frame, said  
mounting frame further having a vertical spring chamber between  
said first and second supporting walls;

a flint spring being received in said spring chamber;  
10 a gas lever being pivotally mounted between said first and second  
supporting walls;

a gas valve with a gas nozzle said gas nozzle being engaged  
with an end of said gas lever to permit release of gas from an  
interior of said lighter body via said gas valve;

15 an ignition device comprising a flint and a striking wheel,  
said striking wheel having a circumferential coarse striking  
surface being positioned right above and in contact with said  
flint and rotatably mounting between said first and second  
supporting walls, wherein said striking wheel further comprising  
20 two circular discs located at said two sides of said striking  
surface, each of said circular discs having a circumferential  
surface and positioned within each of two gaps formed between  
said first and second supporting walls and said striking wheel;  
and

25 a U-shaped wind shield mounted on said first and second  
supporting walls to cover said gas nozzle and said first and

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second supporting walls, said wind shield having an all around  
vertical U-shaped side wall which has a round end portion and two  
wing portion extending from said round end portion, a top wall  
horizontally and inwardly extending from a top side of said round  
5 end portion of said U-shaped side wall and defining a cutout  
right above said gas nozzle, and a first and a second L-shaped  
bent-edge member which are respectively and perpendicularly bent  
from a top side and an end side of said wing portions, wherein  
said first and second bent-edge members are respectively extended  
10 from said top wall along said top side and said end side of each  
of said wing portions for fittedly and respectively resting on a  
horizontal top edge and a vertical rear edge of each of said  
first and second supporting walls, a top end corner of each of  
said wing portions forming a curved corner which has a curvature  
15 matching with at least a quarter of a circumference of said  
striking wheel, so that said striking wheel is sidewardly covered  
by said two wing portions of said windshield, wherein said first  
and second bent-edge members of said wind shield are respectively  
and inwardly extended until abutting two sides of said striking  
20 wheel to form two protecting bent-edge members for better  
striking contact by increasing a contact area with a user's thumb.

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13. (FIRST AMENDED) A disposable lighter, comprising:  
a lighter body for receiving a liquefied fuel therein;  
25 a mounting frame, which is sealedly affixed on top of said  
lighter body, comprising a first and a second supporting wall

upwardly extended from two sides of said mounting frame, said mounting frame further having a vertical spring chamber between said first and second supporting walls;

a flint spring being received in said spring chamber;

5 a gas lever being pivotally mounted between said first and second supporting walls;

*Chang*  
a gas valve with a gas nozzle, said gas nozzle being engaged with an end of said gas lever to permit release of gas from an interior of said lighter body via said gas valve;

10 an ignition device comprising a flint and a striking wheel, said striking wheel having a circumferential coarse striking surface being positioned right above and in contact with said flint and rotatably mounting between said first and second supporting walls, wherein said striking wheel further comprising  
15 two circular discs located at said two sides of said striking surface, each of said circular discs having a circumferential surface and positioned within each of two gaps formed between said first and second supporting walls and said striking wheel;  
and

20 a U-shaped wind shield extends over said first and second supporting walls to cover said gas nozzle and said first and second supporting walls, said wind shield having an all around vertical U-shaped side wall which has a round end portion and two wing portions extending from said round end portion, and a first  
25 and a second L-shaped bent-edge members which are respectively and perpendicularly bent from a top side and an end side of said

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cont.

wing portions, said striking surface at an elevation lower than  
said bent-edge members, wherein said first and second bent-edge  
members are respectively extended from a top wall along said top  
side and said end side of each of said wing portions, a top end  
5 corner of each of said wing portions forming a curved corner  
which has a curvature matching with at least a quarter of a  
circumference of said striking wheel, so that said striking wheel  
is sidewardly covered by said two wing portions of said  
windshield, wherein said first and second bent-edge members of  
10 said windshield are inwardly extended to form two protecting  
bent-edge members for better striking contact by increasing a  
contact area with a user's thumb.

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